



Cotoran[®] 80DF

HERBICIDE

WATER-DISPERSIBLE GRANULE

For Preemergence and Postemergence Weed Control in Cotton

ACTIVE INGREDIENT

Fluometuron: 1,1-dimethyl-3-(a,a,a-trifluoro-m-tolyl)urea 80%

INERT INGREDIENTS 20%

TOTAL 100%

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID

IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water, milk, egg whites, or gelatin solution, and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person. Call physician immediately.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention if irritation persists.

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

IF IN EYES: Flush with plenty of water. Get medical attention if irritation persists.

NOTE TO PHYSICIAN: There is no specific antidote for fluometuron. Induce emesis and lavage stomach. Give saline laxative and supportive therapy.

For medical emergencies involving this product, call toll free 1-888-324-7598.

See Label for Additional Precautions and Directions for Use

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS (AND DOMESTIC ANIMALS)
CAUTION

Causes eye irritation. Harmful if swallowed, absorbed through the skin, or inhaled. Avoid contact with skin, eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters. Apply this product only as specified on this label.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its label. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for protection of agricultural workers on farms, forests, nurseries and greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

Exception: If product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Waterproof gloves
- Shoes plus socks

STORAGE AND DISPOSAL

PESTICIDE DISPOSAL: Do not contaminate water, food or feed by storage and disposal. Do not contaminate water when disposing of equipment wash waters. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

GENERAL INFORMATION

Cotoran 80DF effectively controls selected annual grass and annual broadleaf weeds with no injury to cotton when used in accordance with label directions.

Cotoran 80DF will provide effective control of the following weeds:

ANNUAL

Barnyardgrass
Brachiaria
Crabgrass

Crowfootgrass
Fall Panicum
Foxtail

Goosegrass
Ryegrass

BROADLEAF WEEDS

Buttonweed
Cocklebur
Florida Pusley
Goathead
Groundcherry (Wright)
Lambsquarters

Morningglory
Pigweed
Prickly Sida (Ironweed
or Teawood)
Purslane

Ragweed
Sesbania
Sicklepod
Smartweed
Tumbleweed

Cotoran 80DF is not effective for control of perennial weeds.

APPLICATION INSTRUCTIONS

MIXING

Add two-thirds of the required amount of water to the spray tank. When tank mixing with other products, Cotoran 80DF should be the first product added to the spray tank. With the agitation on, add Cotoran 80DF to the tank. Allow at least 5 minutes for the product to disperse completely before adding other ingredients. Continue agitating while adding other products in the following order:

- (1) dry flowables,
- (2) wettable powders,
- (3) liquid flowables,
- (4) emulsifiable concentrates,
- (5) surfactants or compatibility agents.

Add remainder of water after addition of products is complete.

When tank mixing with other products, check for compatibility using the following procedure. Fill a clean, wide-mouth jar with the intended water or fertilizer solution. Add 3 tablespoons of product to the pint jar. Shake well, then add the other intended ingredients in the order given above, shaking well after each addition. The final mixture should be uniform and smooth with no evidence of coagulation. If incompatibility is evident, begin test again with a compatibility agent added first. Six drops is equivalent to 4 ounces per 100 gallons. If this does not smooth the mixture, try higher concentration or other compatibility agents. Dilution of the products with equal parts of water before adding to the spray tank may improve the mixture.

On cotton where a nitrogen solution may be used as a carrier, Cotoran 80DF must be thoroughly slurried in water before adding to nitrogen solution. Before tank mixing with nitrogen solution, check for compatibility by using the following procedure. Disperse Cotoran 80DF into water at a ratio of 1 tablespoon of Cotoran 80DF to 4 tablespoons of water. Add 2 tablespoons of resulting slurry to 1 pint of the nitrogen solution, agitate and allow to stand undisturbed for 5 minutes. The products are compatible when no lumping, curdling or gelation exist, and when any separation can be readily remixed. If Cotoran 80DF should settle out when mixed with the nitrogen solution, a compatibility agent may be used to improve suspensibility, as noted above.

To maintain a uniform spray mixture, use bypass or mechanical agitation in the test tank. To reduce foaming, bypass agitation should end in the bottom of the tank. The spray mixture should never be left in the tank without constant agitation. Spray equipment must always be thoroughly cleaned before applying Cotoran 80DF as residues of other pesticides can alter the results from Cotoran 80DF even to the point of causing serious crop injury.

EQUIPMENT

Uniform distribution is essential for most effective weed control, fan type nozzles are generally most effective for herbicide application. Uniform distribution may also be influenced by spray pressure and volume, for ground application use no less than 10 gpa for preplant incorporated and preemergence treatment; and 20 gpa for postemergence.

For banded applications use rates of Cotoran 80DF and carrier proportional to broadcast. Dividing row width by band width and multiplying by the rate per acre broadcast will give the amount of Cotoran 80DF needed on the band.

$$\frac{\text{band width (in.)}}{\text{row width (in.)}} \times \text{rate/acre broadcast} = \text{amount needed per acre of field}$$

AERIAL APPLICATION

Apply Cotoran 80DF in a minimum of 5 gallons of water per acre. Avoid applications under conditions where uniform coverage cannot be obtained or where extensive spray drift may occur. Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

Crop	Timing Per Method	Rate Per Acre	Height	Use Instructions
Cotton				Cotoran 80DF provides effective weed control when applied preemergence or postemergence to cotton and weeds. In some areas, a very light incorporation immediately following application to the soil may improve weed control. Postemergence Cotoran 80DF may be applied as directed, semi-directed or over-the-top spray to cotton. Tank mixture with most liquid nitrogen solutions can be done with preemergence application only. To be most effective apply Cotoran 80DF in a program using preemergence, early postemergence (cotton 3 to 6 inches tall), and late postemergence (lay-by) applications. Cotton may be planted in soil previously treated with Cotoran 80DF. Cotoran 80DF may be applied either preplant or preemergence, but not both.
	Preplant	1.25 to 2.5 lbs.		On light soil and sandy soils, low in organic matter, use the lower rate. Apply Cotoran 80DF to the surface of the soil. If tank mixed, follow precautions and label recommendations for use rates of product to be tank mixed.
	Preplant-Incorporation (Arizona & New Mexico Only)	2 lbs.		After beds are prepared for preplant irrigation, apply Cotoran 80DF broadcast. Application should follow furrow irrigation with planting as soon as possible after irrigation. Treatment must be made before beds are dragged off for planting. A bed shaper should be used to remove 1 to 2 inches from the beds after treatment. Irrigation water should not be allowed to puddle or pond over beds.
	Preemergence Treatment	1.25 to 2.5 lbs.		On light silt and sandy soils, low in organic matter, use the lower rate. Cotoran 80DF may be applied to the surface of the soil, or lightly incorporated into the soil, after planting cotton.
	Postemergence Treatment	1.25 to 2.5 lbs.	3 inches to lay-by	Cotoran 80DF may be applied postemergence to cotton and preemergence or postemergence to weeds. Application can be directed, semi-directed or topical to cotton. The higher rate should be used when weeds have emerged. The use of a surfactant at a rate not to exceed 0.5% of spray volume or 1 pint per 25 gallons of water may increase activity on weeds.

Crop	Timing Per Method	Rate Per Acre	Height	Use Instructions
Cotton <i>Cont'd</i>		1.25 to 2.5 lbs.		<u>Trilin®</u> Cotoran 80DF may be applied preemergence following a preplant incorporated application of Trilin. Follow label recommendations for use rates of Trilin and precautions.
		1.25 to 2.5 lbs.		<u>Prowl®</u> Cotoran 80DF may be applied preemergence following a preplant incorporated application of Prowl. Follow label recommendations for use rates of Prowl and precautions.
		1.25 to 2.5 lbs.		<u>Zorial Rapid 80®</u> Cotoran 80DF may be applied preemergence following a preplant incorporated application of Zorial Rapid 80 or pre-emergence in combination with Zorial Rapid 80. Follow label recommendations for use rates of Zorial Rapid 80 and precautions.
		1.25 to 2.5 lbs.	3 inches to bloom	<u>DSMA/MSMA</u> Cotoran 80DF may be tank mixed with DSMA or MSMA and applied as a postemergence directed spray to cotton. Follow label recommendation for use rates of DSMA or MSMA and precautions. Addition of a surfactant at 0.5% of spray volume (1 pint per 25 gallons) will enhance performance. This mixture should be applied in such a manner as to avoid contact of cotton foliage to avoid injury. Do not graze treated areas or feed treated forage or gin trash to livestock.
				PRECAUTIONS The use of this product on light silt and sandy soils low in organic matter may result in serious crop injury or stand loss. Hillsides or slightly eroded areas are particularly subject to this injury. The herbicidal activity of Cotoran 80DF may be lessened under dry conditions; however, rainfall sufficient to germinate seeds and grow the crop will usually activate Cotoran 80DF. Interaction between Cotoran 80DF when applied preemergence or early postemergence and preemergence applications of systemic insecticides may result in crop injury. Cotoran 80DF should not be applied more than three times to the same crop or field in a year. Do not plant crops other than cotton within six months of the last Cotoran 80DF application as injury may result. ARIZONA, CALIFORNIA AND NEW MEXICO: With the exception of cotton, corn and grain sorghum which may be planted the next spring, do not plant other crops to Cotoran 80DF treated areas for one year. Cotoran 80DF is not to be used on coarse-textured soil of less than 1% organic matter. ARKANSAS, LOUISIANA AND MISSISSIPPI: Apply Cotoran 80DF at 1 pound on sandy loam soil low in organic matter. WEST TEXAS: Cotoran 80DF is not to be used on sandy, loamy sand or fine sandy loam soils nor on cotton planted in furrows.

WARRANTY STATEMENT

GRIFFIN warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials or the manner of use or application, all of which are beyond the control of GRIFFIN. In no case shall GRIFFIN be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the Buyer. The exclusive remedy of any buyer or user of this product for any and all losses, injuries, or damages resulting from or in any way arising from the use, handling, or application of this product, whether in contract, warranty, tort, negligence, strict liability, or otherwise, shall not exceed the purchase price paid for this product or at GRIFFIN'S election, the replacement of this product. GRIFFIN MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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Trilin is a registered trademark of Griffin Corporation.
Zorial Rapid 80 is a registered trademark of Sandoz.

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